



Gene Nieminen / USFWS

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FIELD GUIDE

to the

BEACH HABITATS

of the

*National Guard
Training Center*

Sea Girt, New Jersey



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Kerri Quaglia

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Welcome to the Sea Girt National Guard Training Center!



Revised 2011

Clockwise from left: NGTC Beach; Seabeach amaranth; Common buck-eye on seaside goldenrod; Tree swallows feeding on bayberry and poison ivy berries

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INTRODUCTION

As part of its military mission, the National Guard Training Center (NGTC) is responsible for protecting the Threatened and Endangered species that occur on the facility grounds. It is important that visitors respect the wildlife of the NGTC by staying out of the designated protection areas, keep pets off of the designated NGTC Site, and follow all other posted rules.



NGTC Piping plover and chick
Nancy Hayduk

As part of our mission to provide protection to NGTC wildlife, we have created this *Field Guide to the Beach Habitats* to help beach visitors identify and enjoy the flora and fauna regularly occurring at the NGTC. This field guide highlights some of the most common NGTC birds, fish, plants, and invertebrates and provides information about some of the State and Federal Threatened and Endangered Species that occur here.

The NGTC beaches, dune communities, wetlands and grasslands serve as important habitat for resident, migratory and wintering bird species. Over 120 species of birds have been identified at the facility. In addition to a large variety of shorebirds, many other bird species including warblers, flycatchers, herons, rails, raptors and swallows may be observed at the NGTC.

By working closely with the NJ Department of Environmental Protection, the US Fish and Wildlife Service, the Borough of Sea Girt and the Wreck Pond Watershed Association, the NGTC maintains the quality and quantity of NGTC beach wildlife habitat in the face of coastal habitat loss along the Jersey Shore.

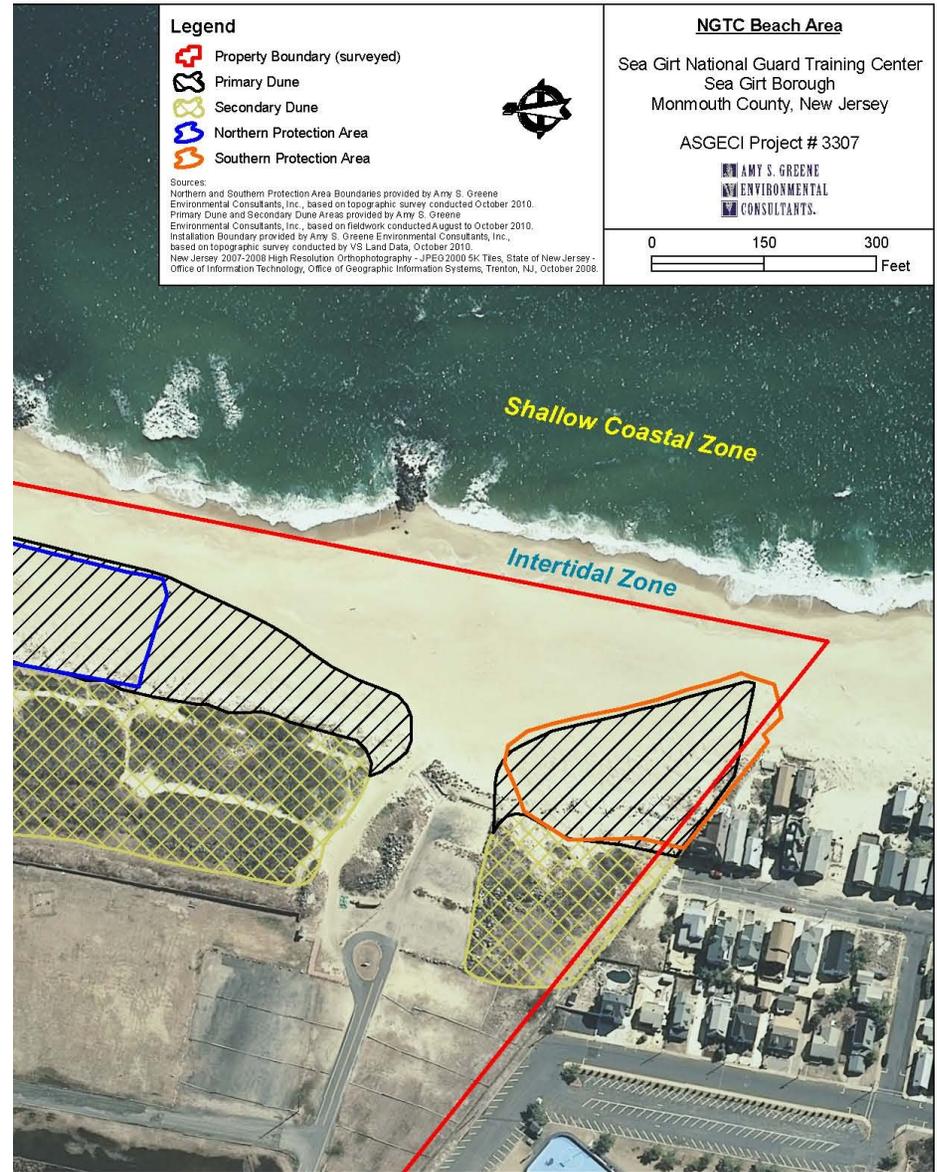


Osprey on the cell tower at the NGTC

Endangered and Threatened Species of the NGTC

The NGTC has responded to the presence of threatened and endangered species onsite with protection efforts to help ensure the survival of these species. The Federally-threatened piping plover and seabeach amaranth are among the species that are protected as part of the Integrated Natural Resource Management Plan for the NGTC.

Federal and State-listed Threatened and Endangered plants and animals are included in the *Threatened and Endangered* section of the booklet and are followed by more common species, which are organized as generalized groups.



BEACH AREA HABITATS

NGTC HABITATS

WILDLIFE AREAS AT THE NGTC BEACH

The following four wildlife areas are represented at the NGTC beach. Some species utilize these different areas for different purposes while other species may remain within one community or zone. A map illustrating the general locations of NGTC beach habitat can be found on pages 29 - 30 of this booklet.

Secondary Dune Community

This community extends from the easternmost end of the fields to the primary dune community. It is dominated by a number of hardy salt and wind tolerant shrubs including poison ivy, bayberry and the introduced rugosa rose.

Primary Dune Community

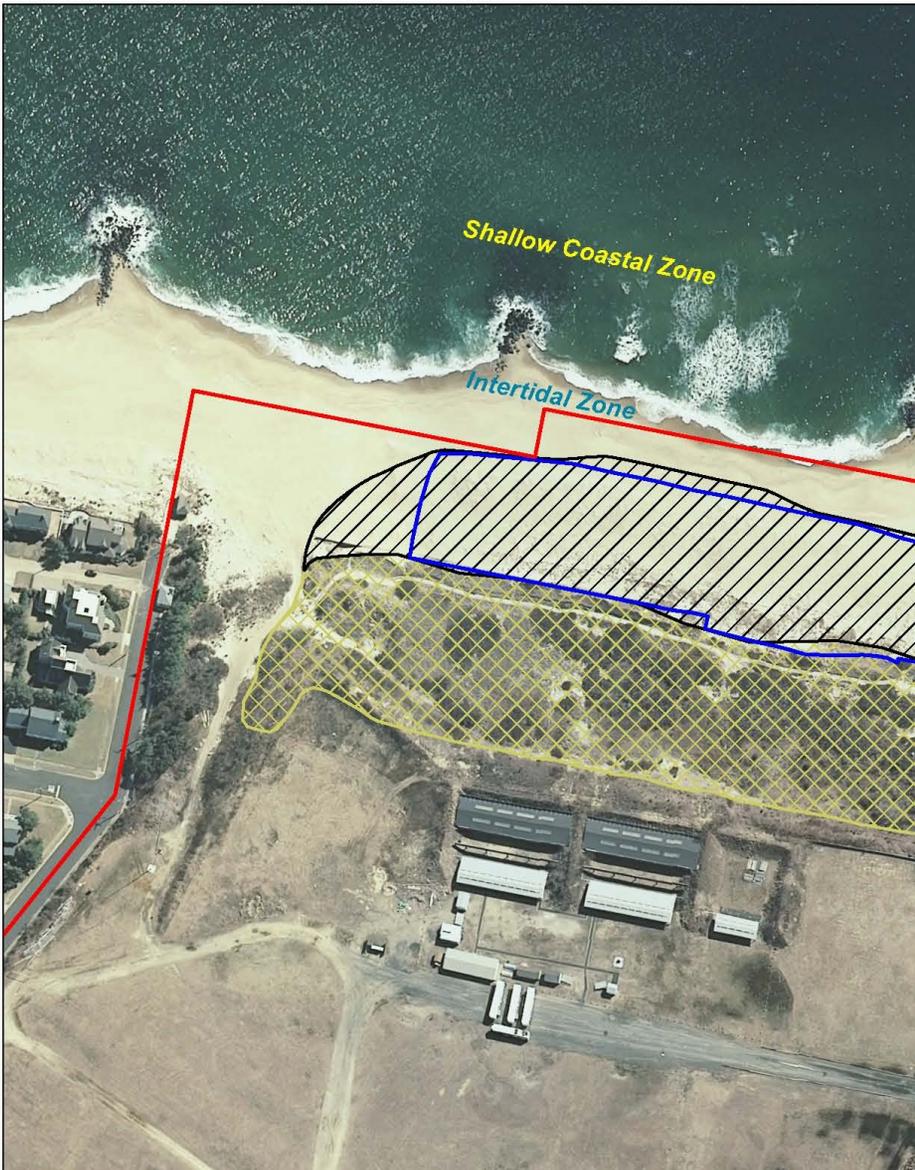
The dominant keystone species of this community is American beach grass. Other species that occur within this community include seaside goldenrod and sea rocket. Portions of these habitats at the NGTC are managed for endangered species and comprise much of the Northern and Southern Protection Areas.

Intertidal / Littoral Zone

This sparsely vegetated area is the location between the high and low tide zones. Plant species may include the federally-threatened seabeach amaranth and sea rocket. Intertidal areas at the NGTC beach are extremely important foraging habitat for many shorebird species, including the Federally - threatened piping plover.

Shallow Coastal Zone

All waters below the low tide mark are included here. This zone contains numerous fish, mollusks, crustaceans and other invertebrates. Numerous foraging birds including the State — endangered least tern and black skimmer may be observed feeding in the waters off of the NGTC.



NGTC BEACH AND HABITATS



OTHER NGTC HABITATS

In spite of its relatively small size, the NGTC has a great diversity of wild-life habitats. This diversity, combined with its unique coastal location, lends to the great diversity of bird species that can be observed at the facility. In addition to the beach habitats identified on page 2, there are three other distinct habitat areas utilized by wildlife. Each of these habitats are discussed below.

Maintained Field

Although often utilized by the facility for various activities, the NGTC open fields provide a unique open grassland habitat for a variety species including wintering horned lark, Atlantic brant (geese) and nesting killdeer, a plover whose unmistakable cries are frequently heard throughout the facility.



Freshwater Emergent and Scrub / Shrub Wetland Community

Located to the north and west of the beach parking lot, this area is very important wetland habitat for a variety of birds and other wildlife. The NGTC's freshwater wetland contains a variety of grasses, sedges and shrubs, such as high tide bush. The wetland seasonally floods and provide crucial habitat for shorebirds and wading birds.



Tidal Pond, Tidal Marsh, Mudflats

The NGTC's southern boundary contains areas of tidal marsh and mudflats associated with Stockton Lake. The exposed mudflats can be observed at low tides. These habitats support a wide variety of resident and migratory shorebirds, wading birds and wintering ducks.



INVASIVE / NUISANCE SPECIES

RUGOSA ROSE

(*Rosa rugosa*)

Non-native / Invasive Species

Description: Shrub native to eastern Asia. Approximately 3 - 5' tall. Stems densely covered with thorns. Alternate compound leaves 3 - 6" long with 5 - 9 dark green leaflets. Leaflets approximately 1 - 3" long with wrinkled upper surface. Flowers are approximately 2" across and pink. Forms shiny red rose hips (fruit) that mature in late summer.



S. Angus

Notes: Rugosa rose forms dense thickets where it grows. This shrub is found primarily in the secondary dune at the NGTC, but can also be found scattered throughout the primary dune.

COMMON REED

(*Phragmites australis*)

Non-native / Invasive Species

Description: A tall, perennial grass that can grow more than 15' in height. Thick, vertical stalks. Flowers form purple or golden colored, bushy panicles in late July and August. Elongated leaves are typically 1 - 1½" at widest point. Forms a dense network of roots and rhizomes underground.



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Notes: Inhabits a variety of brackish and freshwater marsh habitats, as well as riverbanks, ditches, and dredge spoil areas. Often creates monocultures that reduce native plant species diversity and wildlife use. Reproduces through wind-dispersed seeds and rhizome "runners."

INVASIVE / NUISANCE SPECIES

ASIATIC SAND SEDGE (*Carex kobomugi*)

Non-native / Invasive Species

Description: Perennial sedge found primarily in primary and secondary dune communities along the shoreline. Grows up to 12" tall. Leaves are curled and yellow-green in color with small ridges along the edges. This sedge spreads through the production of rhizomes and/or seed heads.



ASGECI

Notes: The root systems of this sedge can grow to several feet below the ground. This sedge is highly invasive and has been found within the primary dune community at the NGTC.

ORIENTAL (ASIATIC) BITTERSWEET

(*Celastrus orbiculata*)

Non-native / Invasive Species

Description: Perennial, deciduous plant that can grow up to 60' as a climbing vine or trailing shrub. Dark brown to brown striated bark. Alternate, glossy, round leaves. Female plants produce clusters of small, greenish flowers in the leaf axils and a large number of fruits and seeds.



ASGECI

At maturity, globular, green to yellow fruits split open to reveal three red-orange, fleshy arils that contain the seeds.

Notes: An aggressive vine that inhabits forest edges, open woodlands, fields, hedgerows and other disturbed lands. It grows over native vegetation and often kills trees by shading, girdling and uprooting them. This species may be distinguished from the native American bittersweet (*Celastrus scandens*) by the location of its fruit. *C. orbiculatus* has small clusters of fruit in the leaf axils while *C. scandens* has clusters only at its branch tips.

THREATENED AND ENDANGERED

PIPING PLOVER (*Charadrius melodus*) **Federally Threatened, State Endangered**

Description: Length to 7.25" with sand colored mantles and wings, and whitish undersides. Distinguishing features include a black tipped orange bill, orange legs, a black neckband and black eyebrow markings.

Notes: Plovers nest in the sand within primary dunes where vegetation cover is less dense. Plovers forage within the primary dunes and intertidal areas. Piping plovers have nested at the NGTC in previous years. Fenced protection areas have been created onsite to protect their nesting habitat. Nesting plovers are highly sensitive to disturbance from human activity and pets.



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K. Quaglia



K. Quaglia

THREATENED AND ENDANGERED

LEAST TERN (*Sterna antillarum*) State Endangered

Description: Length to 9". Least terns are our smallest tern. Characteristics of least terns include long, narrow wings and a short tail. Adults have light gray wings and backs with a whitish underside. Least terns have a black head cap with a white forehead, yellow legs and yellow bill when breeding. Juveniles may have a faint barring pattern on the back and a less pronounced black cap.



Gene Nieminen / USFWS

Notes: Least terns nest throughout the primary dunes and forage for small fish in coastal waters. Least terns have nested in the NGTC primary dunes and may be regularly seen from May until November foraging in the shallow coastal zone. Least terns tend to be noisy and will aggressively protect their nests by diving at predators.

BLACK SKIMMER (*Rynchops niger*) State Endangered (Breeding)

Description: Length to 18" with long, elegant wings. Breeding adults have a black back and neck, and white underside. Juveniles have flecked brown coloration on the back and wings. Skimmers possess a distinctive orange and black bill with a lower mandible that protrudes past the upper.



Gene Nieminen / USFWS

Notes: As the name implies, skimmers forage by skimming the water surface with the lower mandible as they fly. When the bill comes in contact with a small fish, it snaps shut. These birds nest in primary dune habitats, but have not nested at the NGTC.

INVERTEBRATES

GHOST CRAB (*Ocyroide quadrata*)

Description: Carapace to 2". Square-like shell with pronounced eyes on stalks. Pale yellowish in color. Fairly long walking legs with stout pincers.

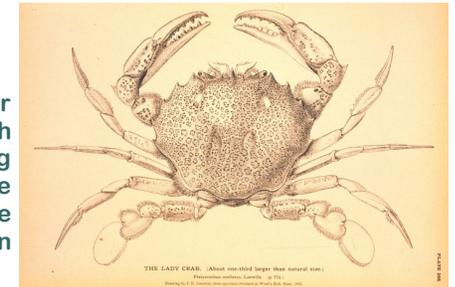


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Notes: Mostly active at night, the evidence of ghost crabs, including burrows and tracks may be seen throughout NGTC beach during the day. The crabs live within the lower primary dune and intertidal zone, scavenging on bits of debris and occasionally preying on small animals. They are extremely quick and typically run in a sideways direction. Ghost crabs have powerful pincers.

LADY CRAB (*Ovalipes ocellatus*)

Description: Carapace to 3". Four sets of long thin walking legs with paddles on the last pair and long powerful pincers. Pinkish purple specks cover the entire carapace with purple patches and spots on the legs. Whitish underneath.



Notes: Typically observed in the intertidal zone and shallow coastal waters (often partially buried). Pincers may produce a powerful pinch.

MOLE CRAB (*Emerita talpoida*)

Description: 1/2 - 1" in length". Oval shaped. Paddle-like limbs and feathery antennae. Eyes are located on thin narrow stalks. Grayish - brown carapace.



Woody Thrower

Notes: Mole (or sand) crabs are typically observed in the intertidal zone, being uprooted and swimming with the tide and wave motion. They feed on debris trapped within their antennae. Mole crabs lack pincers and are harmless.

INVERTEBRATES

LOBED MOON SHELL (*Polinices duplicatus*)

Description: Reaches 3" and gray to tan in color with rings of orange and purple. The live snails have a large rubbery "foot" which may be retracted into the shell and sealed by a rigid brown covering called an operculum.

Notes: Moon shells feed on clams and similar mollusks by drilling a beveled hole near the beak of the prey's shell and injecting digestive enzymes.



ASGECI

SURF CLAM (*Spisula solidissima*)

Description: This large clam reaches a length of 8". The heavy built shell is triangular. The hinge of the clam has a cup like depression called a chondrophore. Surf clams are whitish in color and discarded shells bleach in the sun.

Notes: Washed up surf clam shells are extremely common at NGTC and other beaches south of Cape Cod.



ASGECI

ATLANTIC HORSESHOE CRAB (*Limulus polyphemus*)

Description: Females reach 2' in length. Characteristics include a long tail spike, "book" gills, 5 sets of non-pinching legs, and a set of claspers called chelicerae. Uniformly brownish in color.



Amanda

Notes: A horseshoe crab's tail spike is not a stinger. It functions as a rudder and stabilizer in rough surf. The eggs are an important food source for some migrating shorebirds. The horseshoe crab is more closely related to spiders than it is to other crabs.

THREATENED AND ENDANGERED

OSPREY (*Pandion haliaetus*) State Threatened (Breeding)

Description: Length to 23" long with a 63" wingspan. Ospreys are large raptors with narrow wings. The underside and covert feathers are white with brownish wrist areas and secondary feathers. Their backs are dark brown. Ospreys have a dark eye stripe with a whitish crown and large talons.



NASA

Notes: Ospreys may be regularly seen hovering and diving for fish in the NGTC's shallow coastal waters. Ospreys construct large nests of sticks atop tall manmade structures typically near water bodies. They have nested on the cell tower at the NGTC site and their large nests may be easily observed from the ground.

COOPER'S HAWK (*Accipiter cooperii*) State Threatened

Description: Length to 16.5" with a 31" wingspan. Cooper's hawks have long, rounded tails with thick, dark bands and a broad white tip. Adult Cooper's hawks have blue-gray backs with reddish colored bars on their undersides. Juveniles have brown backs and dark brown streaks on their upper breasts.



S. Angus

Notes: Cooper's hawks are most often seen in the NGTC fields and dune habitats during migratory periods and in winter when they take to the open space for foraging.

THREATENED AND ENDANGERED

NORTHERN HARRIER

(*Circus cyaneus*)

State Endangered
(Breeding), State Special Concern
(Non-breeding)

Description: Length to 18". Slender hawk. Long wings and tail. Flies low with wings held in a "V". White rump is a distinguishing characteristic. Male is gray above with white underparts and black wingtips. Females are dark brown above and streaked brown and white on underparts. Juveniles are similar in coloration to females but have a rusty orange underside with streaking only on chest.



Dan Pancamo

Notes: Harriers are occasionally seen gliding low over secondary dune and wetland habitats at the NGTC.

PEREGRINE FALCON

(*Falco peregrinus*)

State Endangered

Description: Length to 16". Long pointed wings and long tail. Smooth, powerful wing beats. Dark "mustache" or sideburn that extends below the eye is a distinguishing characteristic. Adults have a blue-gray back, dark heads, white breasts and barred or spotted undersides. Females are larger than males. Juveniles have brown backs and vertical streaks on the chest, as opposed to the horizontal bars on the adults.



Carl Mueller

Notes: Migratory and wintering peregrine falcons are fairly common at the NGTC. They may be observed chasing their bird prey at noticeably high speeds over Stockton Lake, the NGTC fields or dunes, or even the ocean.

INVERTEBRATES

COMMON SEA STAR

(*Asterias forbesi*)

Description: Reaches 5.5' in length with radial symmetry and typically five "arms". Color is pinkish, brown or orange on the upper side. The bright orange "eye" on the top of the sea star is actually a sieve through which water enters. The underside contains hundreds of tiny pale yellow tubular feet. Its mouth is centrally located on the underside.



Paul Morris

Notes: Sea Stars feed on clams by slowly prying them apart and injecting digestive enzymes.

BAY SCALLOP

(*Aequipecten irradians*)

Description: Coarsely ribbed scallop to 3" in size. The shell has either 17 - 18 or 19 - 21 ribs, depending on the subspecies (both of which occur in NJ). Coloration is extremely variable including reddish, pink, or cream.



ASGECI

Notes: The scallop's shell is typically found on NJ beaches. When alive, the scallop moves through the water column by abruptly opening and closing its shell in a clapping motion.

BLUE MUSSEL

(*Mytilus edulis*)

Description: The blue mussel is smooth shelled and reaches a length of 4". The shell has pointed beaks. Coloration may be glossy black, bluish or brownish with faint rays.



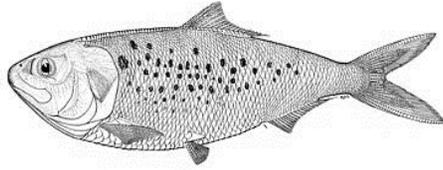
Erik Veldhuis

Notes: These mussels attach themselves to structures such as the NGTC jetties (shallow coastal zone) with fibrous threads. Large clusters may be found detached in the surf.

FISH

ATLANTIC MENHADEN (*Brevoortia tyrannus*)

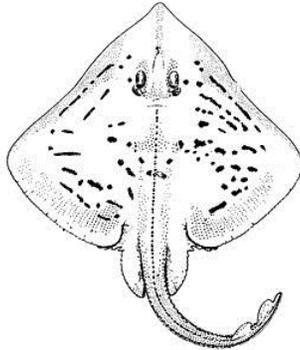
Description: Up to 18" in length. Dorsally blue, green, or bluish-brown. Sides and belly are silver with yellowish fins. Distinct humeral spot usually follows by several rows of smaller spots. Head is very large, maxilla reaches to posterior edge of eye.



Notes: This surface dwelling member of the herring family is a significant food source for bluefish, striped bass and predators, such as Northern gannets. Large schools may be seen at the NGTC in the spring and fall.

CLEARNOSE SKATE (*Raja eglanteria*)

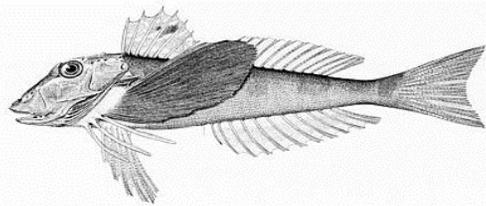
Description: Up to 3'1" in length. Sides of the snout translucent with no spots. Light to dark brown above with darker brown or black roundish spots and irregular bars, white below. Spines present on the shoulder region, spiracle, along midline of back, and entire tail.



Notes: Habitat includes the shallow shore bottom. More common inshore during warmer months. Unlike rays, skates lack venomous stingers.

NORTHERN SEAROBIN (*Prionotus carolinus*)

Description: Up to 17" in length. Elongate, robust anteriorly and tapering posteriorly. Grayish or reddish above, pale below. Head is large with many ridges and spines. Pectoral fins wing-like, reddish-brown to black above and grayish or white below. Black spot between fourth and sixth dorsal spines, surrounded by a light halo.



Notes: This odd shaped fish is found on the bottom of shallow to deep coastal waters, but migrate offshore and south during winter. It feeds on a variety of invertebrates and fish in the shallow coastal zone.

THREATENED AND ENDANGERED

SEABEACH AMARANTH (*Amaranthus pumulis*)

**Federally Threatened,
State Endangered**

Description: A low prostrate annual plant with fleshy red stems and green leaves. Leaves are spinach-like and typically 1 to 2 cm in length. Seedlings are 1 cm across and bright red. Plants are typically 20 - 40 cm in diameter. Miniscule yellow flowers form within the leaf axils.



ASGECI

Notes: This rare plant typically occurs in sandy, sparsely vegetated beach between the high-tide line (intertidal zone) and the edge of the primary dune.

SEABEACH KNOTWEED (*Polygonum glaucum*) **State Endangered**

Description: Small annual or perennial herb with prostrate or erect branching up to 1' long. Leaves are alternate, elliptical, small and whitish in color. Produces small clusters of white or pink flowers up to 4mm long. Fruits are small (4mm) and shiny blackish or brown.



K. Quaglia

Notes: Seaside knotweed grows on sea beaches, edges of coastal ponds, saline marsh edges and primary dune pockets. It has been identified in the primary dune at NGTC.

COMMON DUNE PLANTS

AMERICAN BEACH GRASS (*Ammophila breviligulata*)

Description: A tall, erect perennial grass originating from subsurface rhizomes (underground stems). Unlike other beach grasses, leaf cluster surrounds an elongated flowering spike. Plants are 2 - 3' in height.

Notes: This most common beach plant at the NGTC provides excellent sand stabilization in the primary dunes.



ASGECI

SEASIDE GOLDENROD (*Solidago sempervirens*)

Description: Plants can range 1 - 8' in height. Leaves thick and fleshy, oblong or lance-shaped, and smooth. Stem leaves decreasing rapidly in size upwards. Showy yellow flowers consisting of 8 - 10 rays forming a large terminal cluster.

Notes: Plant of salt marshes and sandy soil near the sea. It is very common and occurs in the primary dune community at the NGTC.



S. Angus

SEA ROCKET (*Cakile edentula*)

Description: This plant is noted for its fleshy, branching stems and unusually pointed seed pods. Leaves are wavy and toothed. Flowers are pale lavender and 1/4" wide. Plants are typically 6 - 12" in height.

Notes: An edible and highly nutritious plant belonging to the mustard family. Sea rocket is among the most common species within the primary dune community at the NGTC.

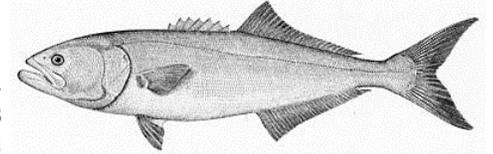


ASGECI

FISH

BLUEFISH (*Pomatomus saltatrix*)

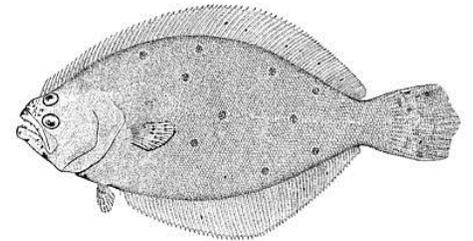
Description: To 3.5' and 30 lbs. Typically to 14 lbs. This elongate compressed fish has 7 - 8 spines on the first dorsal fin, a deep notched caudal fin and a large head. Bluefish have small scales, and prominent, sharp singly arranged teeth. Despite the name, bluefish tend to be more gray or whitish in color.



Notes: This aggressive predator may be observed "blitzing" baitfish in the NGTC shallow coastal zone from the Spring through the Fall.

SUMMER FLOUNDER (*Paralichthys dentatus*)

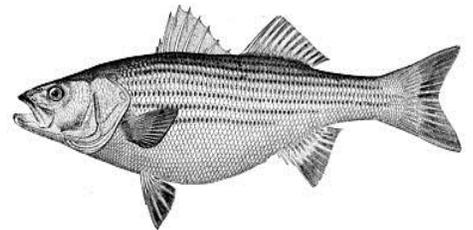
Description: Females to 37" and 29lbs. Typically much smaller, particularly in the surf. Highly dorso-ventrally compressed. Long dorsal and anal fins surround the body. Canine teeth are prominent. Color varies from gray, tan or brown with dark spots on the upper side, and whitish on the underside.



Notes: Also known as fluke, these aggressive bottom dwellers are an important food and recreational fish.

STRIPED BASS (*Morone saxatilis*)

Description: Length to 6' and 100+ lbs. Typically much smaller. Heavily built fish with a large mouth and moderately compressed body. First dorsal fin has 8 - 10 stiff spines. Teeth are small and the scales are fairly large. The color is bluish to olive greenish on the back, silvery on the sides, with a whitish belly. The sides of the fish have 6 - 9 distinct dark uninterrupted stripes.



Notes: Striped bass feed on crabs, fish, worms and mollusks in the NGTC coastal zone.

SWALLOWS

TREE SWALLOW (*Tachycineta bicolor*)

Description: Length to 6". Long, broad wings. Shiny blue-green above with whitish throat and underparts. Juveniles have grayish-brown upperside with a pale grayish breast band.

Notes: In the early fall, tree swallows can be found in flocks of hundreds during migration within the primary and secondary dune communities at the NGTC.



Ken Thomas

BARN SWALLOW (*Hirundo rustica*)

Description: Length to 7". Long, forked tail with white tail spots and long pointed wings. Dark blue-black upperside with whitish to orange underside. Chin and throat reddish brown. Females are generally not as boldly colored as males and have slightly whiter undersides and shorter tails. Juveniles are similarly colored to adults.

Notes: Barn swallows can be observed flying quickly in the primary and secondary dune communities at the NGTC.



Martin Mecnarowski

NORTHERN ROUGH - WINGED SWALLOW (*Stelgidopteryx serripennis*)

Description: Length to 7". Long, forked tail with white tail spots and long pointed wings. Dark blue-black upperside with whitish to orange underside. Chin and throat reddish brown. Females are generally not as boldly colored as males and have slightly whiter undersides and shorter tails. Juveniles are similarly colored to adults.

Notes: Barn swallows can be observed flying quickly in the primary and secondary dune communities at the NGTC.



Dori

COMMON DUNE PLANTS

SOUTHERN BAYBERRY (*Morella cerifera*)

Description: Tall shrub or small tree that grows approximately 10' tall. Leaves are toothed and alternate. Leaves measure approximately 3" long and are dark green and waxy above and pale green below. Fruits are round, waxy and blue-gray in color. They form in clusters on short stalks. Bark on this shrub is gray-brown and smooth.



S. Angus

Notes: This shrub provides an important food source for migratory birds, including yellow-rumped warblers and tree swallows, and can be found primarily in the secondary dune community at the NGTC as well as scattered throughout the primary dune community.

POISON IVY (*Toxicodendron radicans*) **Native / Nuisance Species**

Description: Vine and shrub forms. Shrub form grows up to 4' tall. This plant is commonly identified by its three leaflets. Leaflets are up to 4" long and are dark, shiny green above and lighter green and fuzzy beneath. Forms grayish-white colored berries that mature between August and November.



ASGECI

These berries are an important food source for wildlife.

Notes: The shrub form of this plant is common in the secondary dune communities along the Atlantic Coast. When touched, humans often exhibit an allergic reaction to this plant. Allergic reactions can vary in severity and are the reason that this plant is considered a nuisance species.

MAMMALS

RED FOX (*Vulpes vulpes*)

Description: Similar in size and appearance to a small dog (35 - 40" in length). Generally has reddish fur and a long bushy tail with a white tip. Underparts and chin are white. The backs of ears, lower legs and feet are black.

Notes: This species is a very active scavenger and predator at NGTC and presents a significant threat to nesting shorebirds at NGTC and elsewhere along the Jersey shore. In addition to small birds and mammals, foxes at the NGTC eat a variety of fruits and plant material.

Although secretive and typically seen at dawn or dusk, foxes are quite common at the NGTC. Their tracks, scat and dig marks are regularly visible along the beach. The picture to the right shows a fox den in the secondary dune community at the NGTC.



NPS



Den site at NGTC

EASTERN COTTONTAIL (*Sylvilagus floridanus*)

Description: 15 - 18" in length. Light brown to darker gray in color. Relatively long, erect ears; large hind feet; and a white, fluffy "cotton" tail.

Notes: Abundant in habitats containing edges of open, grassy fields and thorny or shrubby cover. This species may be observed within the primary and secondary dune areas. Diet consists of grasses and other herbaceous species in the summer, and woody plant parts, including bark, twigs and buds, in the winter. Evidence including scat and grass clippings can be seen throughout the primary dune community.



Walter Siegmund

WARBLERS / OTHER SONGBIRDS

COMMON YELLOWTHROAT (*Geothlypis trichas*)

Description: Length to 5". Dull drab yellow on back and upper wings. Typically bright yellow around the throat and rump underside. The female has an olive-brown breastband. Males have a distinct black "robber mask" band across the eyes, cheeks and above the bill. This band is bordered on its upper edge by a narrower white band.



MALE

Dan Pancamo

Notes: This small warbler is a common nesting bird in the dune shrubs of the NGTC. Though secretive, its distinct "wichety, wichety, wichety" call is a common summer sound in the NGTC secondary dune.

RED-WINGED BLACKBIRD (*Agelaius phoeniceus*)

Description: Approximately 8.5" in length. Stocky bird with sharp pointed bill. Males are glossy black with a bright red and yellow shoulder patch. Females are streaked brown with a buff to whitish eyebrow and are often mistaken as sparrows. Juvenile males are similar in color to females but often darker and contain an orangish-colored shoulder patch.



MALE

Bob Jagendorf

Notes: An extremely common bird. Red-winged blackbirds can be found nesting in the wetland complex or resting and foraging in the secondary dune community at the NGTC. Very territorial towards each other and other species.



FEMALE

Mdf

WARBLERS

YELLOW-RUMPED WARBLER (*Dendroica coronata*)

Description: Length is approximately 5.5". Large, long-tailed warbler with a stout bill. Yellow rump distinguishes this warbler from others. All plumages have a yellow patch below their wings on the side. Males have a yellow patch on their crown, a white throat, and heavily streaked chest. Females are similarly colored, but duller and may show more brown. Juvenile and wintering birds are brownish above and white below, with the yellow rump and yellow side patches below the wings.

Notes: In fall, this warbler may be seen in the secondary dune community among the bayberry shrubs. This species is one of a few that is capable of digesting the waxy surfaces of bayberries. Its ability to eat these berries allows it to winter farther north than other warbler species.



FEMALE

Mdf



Alan D. Wilson

YELLOW WARBLER (*Dendroica petechia*)

Description: 5" in length. Plump, short-tailed, thin pointed bill. Dark eye prominent in uniformly yellow face. Reddish streaks below the throat in the male, which are absent or faint in female. Back, wings, and tail yellowish-green to olive, with yellow wing markings and tail spots.

Notes: Often bobs its tail. Song is rapid, variable and may be interpreted as "sweet-sweet-sweet-I'm-so-sweet." Favors wet habitats, open woodlands, gardens and orchards. This species nests in the secondary dune community during the summer.



MALE

Dominic Sherony

MAMMALS / AMPHIBIANS

ATLANTIC BOTTLE NOSED DOLPHIN (*Tursiops truncatus*)

Description: Length to 12'. Back is dark gray, sides are lighter gray. Dorsal fin near center of back. Facial groove between forehead and snout is distinctive.

Notes: Backs are typically seen arching out of the water. May be occasionally seen in the summer and fall in the shallow coastal zone off the NGTC beach. Typically seen traveling in small pods or larger groups. Occasionally can be observed feeding on small fish, such as menhaden.



NASA

FWOHLER'S TOAD (*Bufo fowleri*)

State Special Concern

Description: Length 2 - 3". Tannish brown, gray or reddish in color with a light mid-dorsal stripe. Dark brownish spots cover the upper side of the toad. Three or more small warts occur inside each of the large spots. The underside is light and unspotted. Tadpoles are dark and 1/4 - 1/2" in length (see lower photo).

Notes: Fowler's toads are common in the sandy soils of central and southern New Jersey and less common in northern New Jersey. They are typically found in the dune communities at the NGTC. The Fowler's toad can also be found breeding in temporary pools at the NGTC.



S. Angus



S. Angus

SHOREBIRDS and ASSOCIATES

GREAT BLACK-BACKED GULL (*Larus marinus*)

Description: Length to 30" with blackish backs and white spots on the wing tips. Undersides are white. Legs are pink in color. The eye is surrounded by bright red orbital ring. Like herring gulls, the adult has a yellow bill with a red spot. Juveniles are brownish flecked with more white on the undersides and back than herring gulls.



T. Müller

Notes: Their deep hoarse call is much lower than that of the herring gull's.

HERRING GULL (*Larus argentatus*)

Description: Length to 25". Light gray backs and wings. Undersides are white. Wing tips are darkish in color with white spots. Non-breeding adults have brown streaking on the back of the neck. Juveniles are a fairly uniform brown through their second winter.



Wojsyl

Notes: The herring gull is the most widespread gull at NGTC.

LAUGHING GULL (*Larus atricilla*)

Description: Length to 16.5". Adult breeders have black heads and deep gray backs. Undersides are whitish. Legs and bills are deep red on breeding adults. Juvenile colors range from brown in their first winter to grayish in the second winter. Juveniles and non-breeding adults have a gray-streaked whitish head.



Jcwf

Notes: This species has a distinctive laughing call that starts rapidly and decreases in speed.

SHOREBIRDS and ASSOCIATES

NORTHERN GANNET (*Morus bassanus*)

Description: Length to 32" with a 72" wingspan. Long pointed head and tail. Adults are white with distinctive black wing tips. The adult's yellowish head is not easily seen from a distance. Juveniles are generally brown on both the back and most of the underside. Most easily identified from a distance by their flight behavior.



Andreas Trepte

Notes: Northern gannets are typically seen during the spring and fall over the ocean several hundred yards or more from the NGTC beach. They are easily identified by their distinctive gliding flight and dramatic head first dives when foraging for fish.

DOUBLE-CRESTED CORMORANT (*Phalacrocorax auritus*)

Description: Length to 33". Cormorant bills are long and hooked at the tip. Adults are primarily black with orange skin near the base of the bill. Their long neck projects while flying and appears as long as the tail in flight. First year juveniles are brownish in color.



Mdf

Notes: Cormorant flocks are often observed at the NGTC silently flying in a goose-like "V" formation. They may also be seen bobbing in the NGTC shallow coastal zone and diving from the water's surface for fish.

SHOREBIRDS and ASSOCIATES

AMERICAN OYSTERCATCHER

(*Haematopus palliatus*)

State Special Concern

Description: Length to 7.5". Dark brown back and wings with a whitish underside. Its distinctive black neck and head, and long broad orange bill make it easily recognizable.

Notes: The long bill is used to probe for mollusks and other invertebrates. This species has not been reported breeding at the NGTC. Its repetitious whistling call is quite distinctive and may be heard at NGTC in the spring and summer. This species is typically seen within the intertidal zone.



K. Quaglia

SEMIPALMATED SANDPIPER

State Special Concern

(Non-breeding)

(*Larus argentatus*)

Description: Length is 6.25". Pale gray brown occasionally with some rust coloration. Black bill and legs. Whitish underside with brown streaking around the neck and breast.



Gene Nieminen / USFWS

Notes: A bird observed in the NGTC intertidal areas. Its primary food source in New Jersey is horseshoe crab eggs.

WILLET

(*Catoptrophorus semipalmatus*)

Description: Length to 15". The back and breast ranges from buff gray in non-breeders to flecked brown in breeding adults. The willet's dark wings and broad white wing stripe are its most striking features. Willets are stocky with a long dark, broad probing bill and gray legs.



Mike Baird

Notes: Foraging willets are occasionally seen at the NGTC beaches and wetlands.

SHOREBIRDS and ASSOCIATES

RING-BILLED GULL

(*Larus delawarensis*)

Description: Length to 17.5". Adult plumage consists of a pale gray back and (upper) wings, black wing tips with a small white spot and a white underside. The yellow bill is encircled with a broad black ring. Juveniles range from mostly brown blotchy gray and brown.



Mdf

Notes: This gull is typically observed in the intertidal zone of the beach or in the large maintained fields at the NGTC.

COMMON TERN

(*Sterna hirundo*)

State Special Concern

Description: Length to 12". Streamlined body. Adult breeders have a deep orange-red bill with a black tip and red legs. The whitish underside contains more gray than Forster's terns. The tail is usually shorter than the wing tips.



Dick Daniels

Notes: This bird may be observed foraging for small fish in the shallow coastal zone at the NGTC.

FORSTER'S TERN

(*Sterna forsteri*)

Description: Length to 13". Grayish back and whitish undersides. Forster's terns are less gray than common terns. Adult breeders have a black cap with an orange bill and black tip. The tail typically projects beyond wingtips. Legs tend to be bright orange.



Will Elder / NPS

Notes: This species nests in brackish marshes as opposed to the sandy beaches typically used by breeding common terns. These terns can be observed within the intertidal zone of the beach or flying over the shallow coastal zone.

SHOREBIRDS and ASSOCIATES

BLACK-BELLIED PLOVER (*Pluvialis squatarola*)

Description: Length to 11.5". Plover with a large head and heavy bill. Non-breeding adults and juveniles are brownish flecked with a whitish underside. Breeding adults have a distinctive black underside extending to the rump and a white patch on the head cap and back of the neck. The back and wings are grayish flecked.



Dick Daniels

Notes: Although observed in breeding plumage at NGTC in the spring, this species actually breeds in the Arctic tundra. This plover can often be seen in the fields at the NGTC or within the intertidal zone.

SEMIPALMATED PLOVER (*Charadrius semipalmatus*)

Description: Length to 7.5". Brownish back and secondary feathers, and a whitish underside. This plover has a brownish or black eye band that does not occur in piping plovers. The breeding adult's black forehead and neckband are thicker than that of the piping plover.

Notes: Semipalmated plovers are Arctic tundra breeders. This species is typically found in the fields at the NGTC or within the intertidal zone.



Donna Dewhurst / USFWS

SANDERLING (*Calidris alba*)

**State Special Concern
(Non-breeding)**

Description: Length is 8". Non-breeding adults have pale gray backs and whitish undersides. Breeding adults have a rust colored neck and head. The leading edges of sanderling wings are black followed by a broad white wing stripe.



Mdf

Notes: Sanderlings are common in the intertidal zone at the NGTC, particularly during the fall and winter. This species may be seen in groups rapidly running back and forth in the surf following the wave action.

SHOREBIRDS and ASSOCIATES

KILLDEER (*Charadrius vociferus*)

Description: Length is 10.5". The back is brownish or reddish with a distinct orange rump. Underparts are pale white. Adults and juveniles have two distinct breast/neckbands. The wings and tail are long and slender. Adults may have a dark brown band and a distinct red iris. Downy chicks have a single breastband, a dark brow and eye band, and very long legs.



Hart_curt

Notes: The distinctive high piping "killdeer" call of this large plover is a common sound in the fields at NGTC. This species can be seen running or flying low in the NGTC beach parking lot during the summer, often with its chicks nearby. This bird nests on the ground in the NGTC fields (see above) and will conduct a "broken wing" display in which the bird feigns injury to lure approaching predators away from nests or chicks.



S. Angus

LEAST SANDPIPER (*Calidris minutilla*)

Description: Very small – length is 6". Back is rufous or brown with black feather tips. Breast is brownish. The bill is thin and pointed, slightly drooped and nearly the same length as the head. The green-yellow legs are distinct among small sandpipers.



Britta

Notes: This bird is migratory and often seen flying and feeding in small flocks around the NGTC freshwater wetland. It is most commonly seen when standing water is present in the spring and fall.